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(71) Applicant (for all designated States except US):
MEDESTEA INTERNAZIONALE S.R.L. [IT/IT];
Via Magenta, 43, I-10128 Torino (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ALESSANDRI,
Giulio [IT/IT]; Viale Lombardia, 65, I-20131 Milano
(IT). CARUSO, Arnaldo [IT/IT]; Via Daniele Comboni,
19, I-20124 Brescia (IT). FRANZONE, Josè, Sebastian
[IT/IT]; Via Maria Vittoria, 23, I-10123 Torino (IT).

(74) Agents: RAMBELLI, Paulo et al.; Jacobacci & Partners
S.p.A., Corso Regio Parco, 27, I-10152 Torino (IT).

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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted
a patent (Rule 4.17(ii)) for the following designations AE,
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU,
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KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian
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- of inventorship (Rule 4.17(iv)) for US only

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For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: A PROCESS FOR THE PREPARATION OF STEM CELLS FROM HUMAN MUSCLE TISSUE AND ADIPOSE TIS-
SUE, AND STEM CELLS OBTAINABLE BY THIS PROCESS

(57) Abstract: The invention relates to a process for the preparation of the human stem cells from muscle tissue or adipose tissue.
The process provides for the incubation of cells obtained from a sample of muscle tissue or adipose tissue in a medium comprising
BSA, Bfgf, EGF, VEGF, LIF, heparin and usual inorganic salts, natural acids and vitamins necessary for the growth of mamalian
cells. The invention relates also to the human muscle stem cells (hMSC) and human adipose tissue cells (hFSC) obtainable by this
process.



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INTERNATIONAL SEARCH REPORT

International Application No

EP 03/03667

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N5/06 C12N5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE, PAJ, BIOSIS, WPI Data, EMBASE, CHEM ABS Data, LIFESCIENCES SCISEARCH

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>HAUNER H ET AL: "Effects of epidermal growth factor (EGF), platelet-derived growth factor (PDGF) and fibroblast growth factor (FGF) on human adipocyte development and function." EUROPEAN JOURNAL OF CLINICAL INVESTIGATION. ENGLAND FEB 1995, vol. 25, no. 2, February 1995 (1995-02), pages 90-96, XP000198734 ISSN: 0014-2972 abstract page 91 page 94 - page 95</p> <p style="text-align: center;">----- -/--</p>	1,2,7-9



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

*** Special categories of cited documents:**

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

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European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Surdej, P

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International Application No.

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C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HAUNER H ET AL: "Cultures of human adipose precursor cells." METHODS IN MOLECULAR BIOLOGY (CLIFTON, N.J.) UNITED STATES 2001, vol. 155, 2001, pages 239-247, XP001153827 ISSN: 1064-3745 page 241, right-hand column page 242 - page 243	1,2,7-9
X	DEASY B M ET AL: "Muscle-derived stem cells: characterization and potential for cell-mediated therapy." BLOOD CELLS, MOLECULES & DISEASES. UNITED STATES 2001 SEP-OCT, vol. 27, no. 5, September 2001 (2001-09), pages 924-933, XP002248769 ISSN: 1079-9796 page 925, right-hand column page 927, right-hand column page 929, left-hand column, last paragraph page 929, right-hand column, paragraph 1	1-5
Y	HILTON D J ET AL: "Distribution and binding properties of receptors for leukaemia inhibitory factor." CIBA FOUNDATION SYMPOSIUM. NETHERLANDS 1992, vol. 167, 1992, pages 227-239;discussion 239 - 244, XP009013008 ISSN: 0300-5208 abstract page 228 - page 229	1-5,7-9
Y	WO 01/53465 A (SHAMBLOTT MICHAEL J ;GEARHART JOHN D (US); UNIV JOHNS HOPKINS MED) 26 July 2001 (2001-07-26) page 1, lines 12-20 page 2, lines 13-15 - lines 21-23 page 4, lines 20,21 page 12, line 20 - page 13, line 9 page 28 - page 32 page 51 page 56 - page 57 page 67 - page 68	1-5,7-9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/03667

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-5, 7-9 (all completely)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: claims 1-5,7-9 (all completely)

A process for the preparation of human stem cells from a sample of human adipose or muscle tissue

2. claims: claims 6 (completely), 11-14 (all partially)

Human muscle stem cells and uses thereof

3. claims: claims 10 (completely), 11-14 (all partially)

Human adipose tissue stem cells and uses thereof

INTERNATIONAL SEARCH REPORT

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 0153465	A	26-07-2001	AU	2973101 A	31-07-2001
			EP	1248834 A1	16-10-2002
			WO	0153465 A1	26-07-2001
			US	2003175954 A1	18-09-2003
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